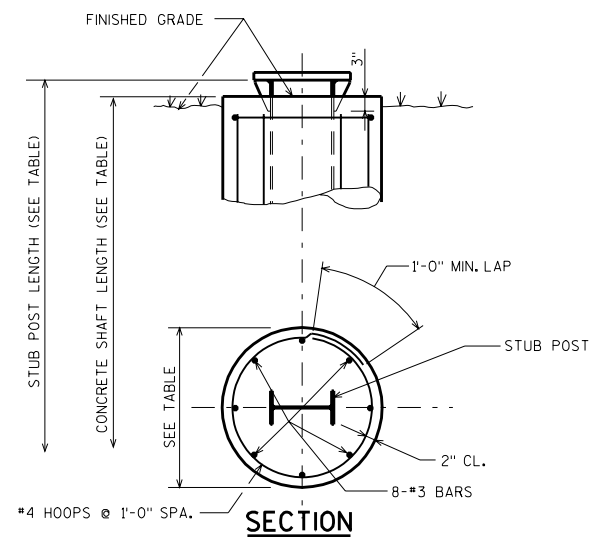
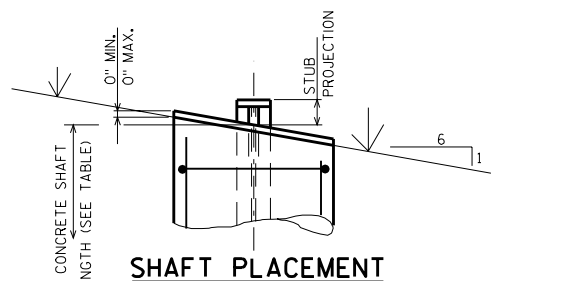


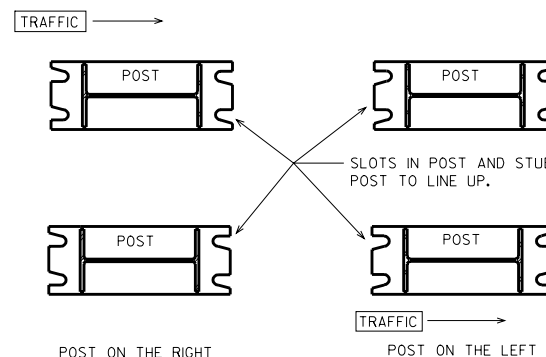
SHIM DETAIL



FOUNDATION DETAIL



SHAFT PLACEMENT



POST SLOT ORIENTATION



QUANTITIES FOR 1 FOOTING		
	CONC. MASONRY C.Y.	H. S. REINF. STEEL LBS.
A	0.6	34
B	0.8	49
C	0.9	50
D	0.9	56
E	1.0	62

	TYPE	#3-VERTICAL	#4-HOOPS
REINF.	A	8 @ 4'-5"	5 @ 6'-3"
	B	8 @ 6'-5"	7 @ 6'-3"
	C	8 @ 6'-11"	7 @ 6'-3"
	D	8 @ 7'-5"	8 @ 6'-3"
	E	8 @ 7'-11"	9 @ 6'-3"

		BASE CONNECTION DATA TABLE											FOUNDATION DATA				
TYPE	DIMENSION POST SIZE	BOLT SIZE & TORQUE	A (IN.)	B (IN.)	C (IN.)	D (IN.)	E (IN.)	T ₁ (IN.)	T ₄ (IN.)	W ₁ (IN.)	R (IN.)	S (IN.)	STUB LENGTH	STUB PROJECTION (IN.)	SHAFT DIAMETER	SHAFT LENGTH	K (LB.)
A	W10 X 12	¾" φ @ 75"■	5/4	1'-0 ¾"	7/8"	3/2"	7/8"	1"	¾"	5/6	13/32	2/8"	3'-6"	3"	2'-0" φ	5'-0"	76.0
B	W12 X 16	7/8" φ @ 85"■	5/2	1'-4 1/4"	1"	3/2"	1"	1 1/4"	5/4	5/6	15/32	3"	5'-6"	3"	2'-0" φ	7'-0"	146.5
C	W12 X 19	7/8" φ @ 85"■	5/2	1'-4 1/4"	1"	3/2"	1"	1 1/2"	7/6	5/6	15/32	3"	6'-0"	3"	2'-0" φ	7'-6"	182.1
D	W12 X 22	7/6" φ @ 85"■	5/2	1'-4 1/4"	1"	3/2"	1"	1 1/2"	3/6	5/6	15/32	3"	6'-6"	3"	2'-0" φ	8'-0"	210.5
E	W12 X 26	1" φ @ 90"■	7	1'-4 1/4"	1 1/4"	4"	1 1/2"	1 1/2"	3/6	5/6	17/32	3"	7'-0"	3"	2'-0" φ	8'-6"	293.0

STRUCTURAL CARBON STEEL PAY WTS. (1POST) = K+ (POST LENGTH X POST WT.)
 "K" INCLUDES STUB, BASE PLATES, STIFFS., BOLTS, AND WASHERS.

WIND PRESSURE = 75 M.P.H.
WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0
ICE LOAD = 3 P.S.F.

GROUP LOADS	PERCENT OF ALLOWABLE STRESS	
1. DEAD	100	
2. DEAD & WIND	140	
3. DEAD, ICE & 1/2 WIND ▲	140	▲25 P.S.F. MIN.

ALLOWABLE SOIL PRESSURE = $1\frac{1}{2}$ T/SQ. FT.

WIND LOAD WAS APPLIED TO THE AREA OF THE SIGN AND TO THE SUPPORTING MEMBERS.

ICE LOAD WAS APPLIED TO ONE FACE OF THE SIGN AND AROUND THE SURFACE OF THE SUPPORTING MEMBERS.

DRAWINGS SHALL NOT BE SCALED.

DESIGN CONFORMS WITH A.A.S.H.T.O. SPECIFICATIONS 1985.
ALL POST, POST STUBS & ATTACHMENTS SHALL BE A.S.T.M.
A709 GRADE 50, EXCEPT WHERE CONTRACT REQUIRES
A709 GRADE 50W.

IF A709 GRADE 50 MATERIALS ARE USED, THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST, FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.

H.S. BOLTS, WASHERS & NUTS SHALL BE A325 TYPE 3 NOT GALVANIZED WHEN CONTRACT REQUIRES A709 GRADE 50W POSTS, POST STUBS, AND ATTACHMENTS.

H.S. BOLTS, WASHERS, & NUTS SHALL BE A325 GALVANIZED WHEN POSTS, POST STUBS AND ATTACHMENTS ARE A709 GRADE 50 AND GALVANIZED.

1. ASSEMBLE SIGN POST TO STUB POST WITH BOLTS AND ONE OF THE FLAT WASHERS ON EACH BOLT BETWEEN PLATES.

2. SHIM AS REQ'D. TO PLUMB POST.

3. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. (SEE TABLE)

4. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NOTE:
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN.
DO NOT OVER TIGHTEN.

<h1 style="text-align: center;">BREAK AWAY SIGN</h1> <h2 style="text-align: center;">SUPPORT DETAIL</h2>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DEVELOPMENT SECTION	
APPROVED: <u>Stanley J. Zerkow</u>	DATE: 1/99